



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8**

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Ref: 8P-P3T

Mr. Chris Hunter, Administrator  
Fisheries Division  
Montana Fish, Wildlife and Parks  
P.O. Box 200701  
Helena, MT 59620

Re: Approval for PCB Paint Removal, Encapsulation and Monitoring  
Big Springs Fish Hatchery Lower Raceways, Lewistown, Montana

Dear Mr. Hunter:

This is in response to the Big Springs Fish Hatchery Lower Raceways Work Plan, dated October 21, 2004. The U.S. Environmental Protection Agency (EPA) Region 8 has determined that the removal and disposal of the paints containing PCBs, the encapsulation of the concrete raceways, as described in the work plan, and the operation of the encapsulated raceways under monitoring conditions will not pose an unreasonable risk of injury to health or the environment.

Regarding monitoring for PCBs, EPA has set the required action levels as described in the Condition D.4 of the Approval. The Agency has considered the Montana Fish, Wildlife and Parks' (FWP) proposed levels, other regulatory limits, capability of certified laboratories to detect PCBs and potential bioaccumulation of PCBs in the food chain. The action levels for PCBs in the approval are as follows: fish is 0.10 mg/kg, water is 0.0017 µg/l, surface (wipe) is 0.2 µg/100cm<sup>2</sup>, algae is 0.017 mg/kg, sediment is 0.2 ppm. Further, FWP has agreed that semi-permeable membrane devices (SPMDS) tests (fat bag tests) be performed once every five years to demonstrate compliance with the EPA recommended surface water human health criterion for waters inhabited by fish for human consumption.

Enclosed is the approval to FWP. If you have any questions, please contact Francis Tran of my staff at 303 312-6036.

Sincerely,

Sadie Hoskie, Director  
Pollution Prevention, Pesticides and Toxics Program

Enclosure

**Approval to the Montana Fish, Wildlife and Parks  
Work Plan for PCB Removal, Encapsulation  
and Monitoring  
Big Springs Fish Hatchery, Lower Raceways, Lewistown, Montana**

This approval authorizes Montana Fish Wildlife and Parks (FWP) to a) remove paints containing Polychlorinated Biphenyls (PCBs) from the concrete raceways at the Big Springs Fish Hatchery Lower Unit, Lewistown, Montana; b) encapsulate the raceways; and c) continue operating the encapsulated raceways under certain monitoring conditions for PCBs.

The approval is granted in accordance with the Federal PCB regulations at 40 Code of Federal Regulations (CFR) §761.61(c) and §761.62(c). Under the referenced regulations, the United States Environmental Protection Agency (EPA) Regional Administrator may approve a cleanup PCBs waste cleanup methodology including removal, encapsulation, to allow for utilization of the encapsulated concrete raceways under monitoring conditions if it is found that the cleanup method and that the continued use of these raceways will not pose an unreasonable risk of injury to health or the environment.

The approval, allowing the FWP to initiate the PCBs cleanup activities as described in the Big Springs Hatchery Work Plan Submittal, Work Plan for PCB Removal & Encapsulation, Big Springs Fish Hatchery Lower Raceways, Lewistown, Montana, dated October 21, 2004 (work plan), is effective immediately. Upon completion of the PCBs removal and encapsulation, the raceways can be operated under monitoring conditions set forth in the approval. The approval does not relieve the FWP from complying with all other applicable Federal, State and local regulations and permits. Departure from the approval conditions without prior written approval may result in the immediate suspension of this approval, the commencement of proceedings to revoke this approval, and/or an enforcement action. In addition, this approval does not preclude EPA from initiating an enforcement action, including seeking civil penalties, for violation of the Toxic Substances Control Act and the Federal PCB regulations.

**A. Removal of Paints Containing PCBs:**

1. Paint containing PCBs shall be removed using high pressure water blasting or sandblasting process. Chemical paint removers cannot be used without an EPA approval.
2. The removal process shall be performed in containment barriers, and dust and water collection systems as described in the work plan to prevent any releases of PCBs to the environment.
3. Samples at three locations as described in the work plan shall be obtained and analyzed for PCBs to verify potential contamination from the paint removal process. If PCBs are detected, all contamination shall be removed and disposed of off-site in accordance with the regulations.

4. All wastes generated from the cleanup must be collected, stored, and disposed of in accordance with the work plan and the PCB regulations at 40 CFR Part 761.

## B. Encapsulation

1. All raceways surfaces shall be inspected for structural damage and no visible traces of paints. Structural damage shall be repaired and paint residues shall be removed prior to applying encapsulated coatings.
2. Two solvent resistant and water repellent coatings (e.g., epoxy or polyurethane) of contrasting colors shall be applied on the concrete raceways. Coating products which have not been proposed in the work plan require an approval by EPA prior to applying on the raceways.
3. Wipes samples shall be performed at the three locations on the encapsulated concrete raceway surfaces as specified in the work plan. If PCBs are detected at concentrations at  $0.2 \mu\text{g}/100\text{cm}^2$  or greater, the raceways shall be recoated.
4. Two semi-permeable membrane devices (SPMDS) samples will be collected and analyzed for PCBs: one at the raceway 49 and the other at the aeration canal as described in the work plan. If PCBs are detected at concentrations  $0.000064 \mu\text{g}/\text{l}$  or above, FWP shall consult with EPA regarding further investigations to identify the PCB sources.
5. The encapsulated surface shall be marked with the  $M_L$  mark in a location easily visible to individuals present in the area. The  $M_L$  mark shall be placed over the encapsulated area or the barrier to the encapsulated area in accordance with 40 CFR §761.30(p).

## C. General Requirements for the Cleanup Activities

1. Any person conducting cleanup activities under this approval must take necessary measures to protect against direct release of PCBs to the environment from the decontamination area.
2. Persons participating in cleanup activities shall wear protective clothing, or use equipment, to protect against dermal contact or inhalation of PCBs or materials containing PCBs.
3. Records of all the reports and sampling conducted under this approval must be established and maintained by FWP for 3 years from the date of decommission of the raceways. The sampling record must show sampling locations and analytical results and must be retained at the fish hatchery site office.
4. A summary of the sampling locations and analytical results and a certification that the cleanup has been conducted and completed in accordance with this approval must be submitted to EPA prior to operating the raceways or within 30 days of completing the cleanup under this approval, whichever comes first.

D. Monitoring:

1. Quiescent zones will be constructed to reduce pollutants discharged to the Big Springs creek. The quiescent zones are designed to retain solid wastes. Sediment must be sampled and analyzed for PCBs prior to removal from the settling basins. FWP shall notify to the Director of the Pollution Prevention and Pesticides Program, EPA at (303) 312-6390 within 24 hours from the discovery of PCBs at any concentrations in the sediment. FWP shall conduct corrective actions as determined by EPA if necessary.
2. FWP shall conduct regular inspections and samplings as described in Section 3, Annual Operating, Inspection & Testing Protocol, of the work plan. Annual monitoring for PCBs includes water (water column), fish, surface (wipe), algae, and sediment. Two SPDMS samples will be conducted once every five years in lieu of water column samples.
3. The annual report shall be submitted to the Director of the Pollution Prevention, Pesticides and Toxics Program, EPA within 60 days from the completion of each annual sampling event. The report should include a summary of findings, inspections and maintenance records, analytical results of samples for water, fish, surface (wipe), algae and sediment, and a professional engineer's certification.
4. The action levels for PCBs in fish is 0.10 mg/kg, water is 0.0017 µg/l, surface (wipe) is 0.2 µg/100cm<sup>2</sup>, algae is 0.017 mg/kg, sediment is 0.2 ppm.
5. If PCBs are detected at the action levels, FWP shall notify to the Director of the Pollution Prevention, Pesticides and Toxics Program, EPA within 24 hours of the discovery. Within five (5) working days, FWP shall submit a corrective action plan to EPA for approval. The corrective action plan includes, but not limit to, retesting samples, correlating to other parameters, and increasing frequencies of sampling as described in the work plan.
6. The annual sampling plan and report shall be conducted each year until all the raceways are decommissioned.
7. FWP shall submit to EPA a demolition plan, as described in Section 3 of the work plan, if PCBs continue migrating to the environment or the raceways reach the end of their useful life. The plan must be submitted to EPA for approval at least 60 days prior to the demolition of the raceways.

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Date

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Sadie Hoskie, Director  
Pollution Prevention, Pesticides and Toxics Program